

Serial no. 09/524,076

Amendment in Resp. to Off. Action of Oct. 21, 2003

UTILITY PATENT

B&D No. P-TN-1698

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): ~~A~~ The miter saw of Claim 4, comprising:

~~a base assembly;~~

~~a nonremovable fence attached to the base assembly for supporting a work piece;~~

~~a rotatable table rotatably connected to the base assembly, the table having a plane for supporting the work piece;~~

~~a saw assembly including a motor and a blade driven by the motor; and~~

~~a pivot arm pivotally attached to the table and supporting the saw assembly, allowing a user to plunge the blade below the table plane;~~

wherein area of the blade below the table plane when plunged is between about 14.4% and about 17.5% of total blade area.

Claim 2 (original): The miter saw of Claim 1, wherein the blade area below the table plane is about 15.75% of the total blade area.

Claim 3 (original): The miter saw of Claim 1, further comprising a sliding fence connected to the base assembly.

Claim 4 (currently amended): A miter saw comprising:

a base assembly;

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a ~~nonremovable~~ fence attached to the base assembly for supporting a workpiece, the fence having a fence plane;

a rotatable table rotatably connected to the base assembly, the table having a table plane for supporting the workpiece;

~~a fence connected to the base assembly and having a fence plane;~~

a saw assembly including a motor and a blade driven by the motor, the blade having a radius and a blade center; and

C1 a pivot arm pivotally attached to the table and pivotally supporting the saw assembly about a first axis substantially parallel to the table plane, allowing a user to plunge the blade below the table plane;

wherein distance between the first axis and the table plane is about 0.472 times the radius, distance between the first axis and the fence plane is about 1.45 times the radius, and distance between the first axis and the blade center is about 1.882 times the radius.

Claim 5 (original): The saw of Claim 4, wherein distance between the blade center and the table plane is about 0.57 times the radius when the blade is plunged below the table plane.

Claim 6 (original): The saw of Claim 4, wherein chord length of blade periphery plunged below the table plane is at least 1.6 times the radius.

Claim 7 (original): The saw of Claim 4, wherein chord of blade periphery plunged below the table plane has a first endpoint behind the fence and a second endpoint in front of the fence, and distance between the fence and the second endpoint is at least 1.1 times the radius.

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Claim 8 (original): The saw of Claim 7, wherein the distance between the fence and the second endpoint is at least about 1.236 to about 1.252 times the radius.

Claim 9 (original): The saw of Claim 7, wherein the distance between the fence and the second endpoint is at least 1.244 times the radius.

cancel
Claim 10 (original): The saw of Claim 7, wherein the distance between the fence and the second endpoint is between about 0.60 and 0.775 times the chord length.

Claim 11 (original): The saw of Claim 7, wherein the distance between the fence and the second endpoint is about 0.757 times the chord length.
